Electronic Data Reporting
Acid Rain Program/ Subpart H

March 2003
Version 2.2

1. ***Who is required to use Electronic Data Reporting v2.1 or v2.2 formats?***

For all units for which you are required to monitor and report emissions data according to 40 CFR Part 75, you must use either EDR v2.1 or v2.2. Presently, this includes Acid Rain Program units, and units in the NO_x Budget Trading Program that are subject to the monitoring and reporting provisions of Subpart H of Part 75.

2. ***Which Acid Rain Program and NO_x Budget Trading Program facilities are required to use EDR v2.1 and which ones are required to use EDR v2.2?***

Acid Rain Program units have been required to report in EDR v2.1 since April 1, 2000.

Non-Acid Rain affected facilities subject to the NO_x Budget Trading Program must report in EDR v2.1 (or v2.2) beginning on:

- The applicable "commencement of reporting" date specified in the State SIP or in 40 CFR Part 97; or
- An earlier date if the NO_x Authorized Account Representative intends to apply for early reduction credits.

Note, however, that as a result of changes to Part 75 promulgated on June 12, 2002, you must upgrade from v2.1 to EDR v2.2 for some Acid Rain Program units and some NO_x Budget Trading Program units. The following units are affected by the upgrade to EDR v2.2:

- Units that do not produce electrical or steam load (e.g., cement kilns, refinery process heaters, etc.)
- Other ARP and Subpart H units that elect to use certain new options provided by the June 12, 2002 rule.

EPA is providing separate implementation guidance for each category of rule change, to clarify whether an upgrade to v2.2 is needed (see "Implementation Guidelines for the June 12, 2002 Revisions to Part 75"—available on the Clean Air Markets Division (CAMD) website at www.epa.gov/airmarkets/).

3. ***If my facility is load-based and I do not elect to use any of the new options in the June 12, 2002 rule, may I continue to report in EDR v2.1?***

Yes. EPA will continue to accept EDR v2.1 files . Upgraded editions of EDR v2.1 and the accompanying instructions, dated March 2003, have been posted on the CAMD website. These upgraded editions are consistent with the June 12, 2002 rule revisions.

4. ***How do the structure and data elements of EDR v2.2 differ from EDR v2.1?***

There are very few structural differences between EDR versions 2.1 and 2.2. All of the record types listed in Tables 1 through 5 below are common to both EDR versions. However, in EDR v2.2, six record types (i.e., RTs 300, 360, 504, 605, 650 and 660) contain new data fields. These new data fields have been coded after the existing fields. No new data fields have been inserted between any of the existing fields. The new data fields are only to support changes to Part 75 that were promulgated on June 12, 2002.

In addition to the record type changes described above, the data element descriptions in a number of v2.2 Record Types differ from the corresponding data element descriptions in the v2.1 record types. Some new codes have also been added to the "RANGE" and "UNITS" columns of several records, and a few data fields have been reserved. Most of these changes are associated with the June 12, 2002 rule revisions.

Table A-1 in Appendix A of this document describes the structural differences between EDR versions 2.1 and 2.2. Table A-2 in Appendix A summarizes the differences in the data element descriptions, codes, etc. between the March 2003 editions of the two EDR versions.

5. ***EDR version 2.2 was first posted in August, 2002. How does the March 2003 edition of v2.2 differ from the August, 2002 edition ?***

The March 2003 edition of EDR v2.2 differs very little from the August, 2002 edition. A one-character alphanumeric flag has been added to RT 660. A few new codes have been added to other record types, and the instructions for several data fields have been expanded or clarified. The differences between the August, 2002 and March 2003 editions can best be seen in the March 2003 "redline" copies of EDR v2.2 and the v2.2 Instructions, posted on the CAMD website.

6. ***How is the EDR organized?***

The EDR is divided into five tables:

Table 1 provides an index listing all the possible EDR record types that may be submitted in a v2.2 electronic report.

Tables 2 through 5 define the specific computerized layout or "record structures" of the electronic reports, containing the following types of data: Quarterly Emission Data (Table 2), Monitoring Plan Data (Table 3), Certification-QA/QC Test Data (Table 4), and Compliance Certification Data (Table 5).

The record structures in Tables 2 through 5 define the order, length, and placement of information within the electronic report or "file" (i.e., the Record Type, Type Code, Start Column, Data Element Description, Units, Range, Length, and Fortran (FTN) Format for each data element in the electronic report). This information is used to construct electronic files to submit electronic reports to the U.S. Environmental Protection Agency.

In Tables 1 through 5, each v2.2 record type that differs from the the corresponding record type in EDR v2.1, either by the addition of a new field or by a change to an existing field, description or code has been marked as "(Modified)" next to the description in the Record Type column. The March 2003 editions of EDR v2.1 and 2.2 serve as the basis of this comparison. Note that some of the changes are not visible in this EDR format document because they involve new codes that are provided only in the EDR instructions document.

7. ***Which EDR records are needed for which programs?***

The Program Column in Tables 2 through 5 indicates the regulatory programs for which each record type may be applicable. "ARP" indicates Part 75 Acid Rain Program requirements, and "Subpart H" indicates the applicability of the record to a unit using the NO_x mass monitoring provisions in Subpart H of Part 75 (e.g., units covered by the NO_x Budget Trading Program). This designation includes Acid Rain units also subject to Subpart H.

8. ***How do I find out more about reporting using the EDR v2.2 format?***

More detailed information on the selection of record types for reporting and the use of specific columns within a record type for a particular program is included in the ***"EDR v2.2 Reporting Instructions"*** (March 2003). You can find these instructions on EPA's Clean Air Markets Division website at www.epa.gov/airmarkets/.

TABLE 1: EDR v2.2 ELECTRONIC DATA REPORTING RECORD TYPES

RECORD TYPES			
GROUP	**SUB-GROUP**	**RECORD TYPE**	**RECORD**
Facility Information (100)	Facility Information	Facility Identification (Modified)	100
		Record Types Submitted (Optional)	101
		Facility Location and Identification Information (Modified)	102
Monitoring Data (200)	Pollutant Gas Concentrations	SO_2 Concentration Data	200
		NO_x Concentration Data	201
		CO_2 Concentration Data	202
	Diluent Gas Concentrations	CO_2 Diluent Concentration Data	210
		O_2 Diluent Concentration Data	211
	Moisture Data	Moisture Data	212
	Volumetric Flow	Volumetric Flow Data (Modified)	220
	Daily Quality Assurance Data and Results	Daily Calibration Test Data and Results	230
		Flow Daily Interference Check Results	231
	Reference Method Backup QA Data	Hourly Pollutant and Diluent Concentration Data from RM Backup Analyzers	260
		Quality Assurance Run Data for Reference Method Analyzers or Systems Used as Backup CEMS	261
		Reference Method Backup Flow Rate Monitor (Run Summary)	262
Unit Data (300)	Unit Operating and Cumulative Emissions Data	Unit Operating Parameters (Modified)	300
		Quarterly Cumulative Emissions Data	301
		Oil Fuel Flow (Modified)	302
		Gas Fuel Flow (Modified)	303
		Quarterly Heat Input From Long Term Fuel Flow Measurements for Qualifying Low Mass Emission Units (Modified)	305
		Cumulative NO_x Mass Emissions Data	307
	SO_2 Mass Emissions Data	SO_2 Mass Emissions Data	310
		SO_2 Mass Emissions Alternative Estimation Parameters for Oil	313
		SO_2 Mass Emissions Alternative Estimation Parameters for Natural Gas	314
	NO_x Emissions Data	NO_x Emission Rate Data (Modified)	320
		NO_x Emission Rate Alternative Estimation Parameters for Oil and Gas	323
		NO_x Emission Rate Estimation Based on Appendix E	324
		NO_x Emission Rate Estimation Based on Appendix E for Multiple Fuel Hours	325
		NO_x Mass Emissions	328

TABLE 1: EDR v2.2 ELECTRONIC DATA REPORTING RECORD TYPES

RECORD TYPES			
GROUP	**SUB-GROUP**	**RECORD TYPE**	**RECORD**
Unit Data (300)	CO_2 Mass Emissions Data	CO_2 Mass Emissions Data	330
		CO_2 Mass Emissions Estimation Parameters	331
	Qualifying Low Mass Emissions Unit Data	Hourly Emissions Data for Qualifying Low Mass Emissions Units (Modified)	360
Monitoring Plan Information (500)		Stack/Pipe Header Definition Table	503
		Unit Information (Modified)	504
		Program Indicator for Report	505
		EIA Cross Reference Information	506
		Fuel Usage Data to Qualify as a Peaking Unit or an Acid Rain Program Gas-fired Unit	507
		Subpart H Reporting Frequency Change	508
		Monitoring Systems/Analytical Components Table (Modified)	510
		Formula Table (Modified)	520
		Span Table (Modified)	530
		Maximums, Minimums, Defaults and Constants (Modified)	531
		Unit and Stack Operating Load Data (Modified)	535
		Range of Operation and Normal Load or Level (Modified)	536
		Fuel Flowmeter Data	540
		Reasons for Monitoring System Downtime or Missing Parameter (Optional)	550
		Monitoring System Recertification, Maintenance, or Other Events	556
		Appendix E NO_x Correlation Curve Segments	560
		Monitoring Methodology Information (Modified)	585
		Control Equipment Information	586
		Unit Fuel Type (Modified)	587
Certification Test Data (600)	Calibration/Error Tests	7-Day Calibration Error Test Data and Results	600
	Linearity Checks	Linearity Check Data	601
		Linearity Check Results	602
	Leak Checks	Flow Leak Check Results	603
	Flow/Load Checks	Reference Data for Flow-to-Load Ratio or Gross Heat Rate Evaluation (Modified)	605
		Quarterly Flow-to-Load Ratio or Gross Heat Rate Check	606

TABLE 1: EDR v2.2 ELECTRONIC DATA REPORTING RECORD TYPES

RECORD TYPES			
GROUP	**SUB-GROUP**	**RECORD TYPE**	**RECORD**
Certification Test Data (600)	RATA/Bias Tests	RATA and Bias Test Data (Modified)	610
		RATA and Bias Test Results (Modified)	611
		Reference Method Supporting Data for Flow RATA Tests	614
		Reference Method Supporting Data for Flow RATA Tests	615
		Reference Method Supporting Data for Flow RATA Tests	616
	Cycle Time Test	Cycle Time Test Data and Results	621
	On Line/Off Line Calibration Demonstration	Qualifying Test for Off-line Calibration Error Tests	623
	Miscellaneous QA Test/Activity	Other QA Activities	624
	Fuel Flowmeter Accuracy Tests	Fuel Flowmeter Accuracy Test	627
		Accuracy Test for Orifice, Nozzle, or Venturi Type Fuel Flowmeters	628
	Quarterly Fuel Flow-to-Load Analysis	Baseline Data for Fuel-Flow-to-Load Ratio or Gross Heat Rate Check for Fuel Flowmeters	629
		Quarterly Fuel-Flow-to-Load Test for Fuel Flowmeters	630
	Alternative Monitoring Petition Data	Alternative Monitoring System Approval Petition Data	640
		Alternative Monitoring System Approval Petition Results and Statistics	641
	LME Certification	Qualifying Data for Low Mass Emissions Units Excepted Methodology (Modified)	645
	Appendix E and Unit Specific Default Emission Rate Test Data	NO_x Emission Rate Correlation Test Data (Modified)	650
		NO_x Emission Rate Correlation Results	651
		Heat Input from Oil Combusted During Test	652
		Heat Input from Gas Combusted During Test	653
		Unit Group Testing (Modified)	660
	QA Test Extensions/Exemption Claims	Single-load or Single-level Flow RATA Claim (Modified)	695
		Fuel Flowmeter Accuracy Test Extension	696
		RATA Deadline Extension or Exemption	697
		Quarterly QA Test Exemption Claim	698
		QA Test Extension Claim Based on Grace Period	699

TABLE 1: EDR v2.2 ELECTRONIC DATA REPORTING RECORD TYPES

RECORD TYPES			
GROUP	**SUB-GROUP**	**RECORD TYPE**	**RECORD**
Certification Data (900)	Certification Data	Part 75 Certification Statement and Designated Representative Signature	900
		Part 72 Certification Statement	901
		Cover Letter Text (file specific) (Optional)	910
		Cover Letter Text (not specific to file) (Optional)	920
		Subpart H Certification Statement and NO_x Authorized Account Representative Signature	940
		Subpart H General Certification Statement	941
		Contact Person Record (Optional)	999

TABLE 2: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES

FACILITY INFORMATION								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
FACILITY INFORMATION								
Facility Identification	100	1	Record type code				3	I3
		4	Facility/ORISPL number				6	I6
(Modified)		10	Calendar quarter data contained in report			1-4	1	I1
		11	Calendar year data contained in report		YYYY	≥1993	4	I4
		15	EDR version ()			V2.2	5	A5
					Total Record Length		19	
Record Types Submitted	101	1	Record type code				3	I3
		4	Unit ID				6	A6
(Optional)		10	Stack/Pipe ID				6	A6
		16	Parameter reported [1]				7	A7
		23	Record type used				3	I3
		26	Number of records			1-9999	4	I4
					Total Record Length		29	
Facility Location and Identification Information	102	1	Record type code				3	I3
		4	Plant name				20	A20
		24	[Reserved]				12	
(Modified)		36	EPA AIRS facility system (AFS) ID				10	A10
		46	State facility ID				15	A15
		61	Source category/type				20	A20
		81	Primary SIC code				4	I4
		85	State postal abbreviation				2	A2
		87	County code (FIPS)				3	I3
		90	[Reserved]				1	
		91	Latitude		DDMMSS		6	I6
		97	Longitude		DDDMMSS		7	I7
					Total Record Length		103	

[1] Available codes are: CO2CONC, CO2MASS, DILUENT, FLOWRTE, GASRATE, HEATINP, LOWMASS, MOISTUR, NOXCONC, NOXMASS, NOXRATE, OILRATE, OPERATN, OSNSUMM, QTRSUMM, SO2CONC, SO2MASS

TABLE 2: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES

MONITORING DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
POLLUTANT GAS CONCENTRATIONS								
SO_2 Concentration Data (Modified) **ARP only**	200	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Percent monitor data availability for SO_2		%	0.0-100.0	5	F5.1
		29	Average SO_2 concentration for the hour		ppm		6	F6.1
		35	Average SO_2 concentration for the hour adjusted for bias		ppm		6	F6.1
		41	Method of determination code			01-10,12, 16,17,19, 20,21,22,23, 54,55	2	I2
					Total Record Length		42	
NO_x Concentration Data (Modified)	201	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Average NO_x concentration for the hour		ppm		6	F6.1
		30	Method of determination code			01-04, 06-12,17, 19,20,21,22, 23,54,55	2	I2
		32	Adjusted average NO_x concentration for the hour		ppm		6	F6.1
		38	Percent monitor data availability for NO_x concentration		%	0.0-100.0	5	F5.1
					Total Record Length		42	
CO_2 Concentration Data (Modified) **ARP Only**	202	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Average CO_2 concentration for the hour		%		6	F6.1
		30	Method of determination code			01-04, 06-10, 12,17,20, 54,55	2	I2
		32	Percent monitor data availability for CO_2 concentration		%	0.0-100.0	5	F5.1
					Total Record Length		36	

TABLE 2: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES

MONITORING DATA

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
DILUENT GAS CONCENTRATIONS								
CO_2 Diluent Concentration Data (Modified)	210	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Average CO_2 concentration for the hour		%	0.0-100.0	5	F5.1
		29	Method of determination code			01-04, 06-10,12,17, 20,54,55	2	I2
		31	Percent monitor data availability for CO_2 concentration		%	0.0-100.0	5	F5.1
						Total Record Length	35	
O_2 Diluent Concentration Data (Modified)	211	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Average O_2 concentration for the hour		%	0.0-100.0	5	F5.1
		29	Method of determination code			01-04, 06-10, 12,17,20, 54,55	2	I2
		31	Moisture basis of measurement (W-wet or D-dry (for O_2 used for moisture calculations), Blank (for O_2 used only for diluent purposes))			W,D	1	A1
		32	Percent monitor data availability for O_2 concentration		%	0.0-100.0	5	F5.1
						Total Record Length	36	
MOISTURE DATA								
Moisture Data (Modified)	212	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Average moisture content of flue gases for the hour		%H2O	0.0-100.0	5	F5.1
		29	Formula ID				3	A3
		32	Method of determination code			01-04, 06-10,12, 21,54,55	2	I2
		34	Percent monitor data availability for moisture		%	0.0-100.0	5	F5.1
						Total Record Length	38	

TABLE 2: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES

MONITORING DATA

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
VOLUMETRIC FLOW								
Volumetric Flow Data (Modified)	220	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Percent monitor data availability for volumetric flow		%	0.0-100.0	5	F5.1
		29	Average volumetric flow rate for the hour		scfh		10	I10
		39	Average volumetric flow rate for the hour adjusted for bias		scfh		10	I10
		49	[Reserved]				5	
		54	Load range or operational bin number			00-20	2	I2
		56	Method of determination code			01-12, 20, 54,55	2	I2
						Total Record Length	57	
DAILY QUALITY ASSURANCE DATA AND RESULTS								
Daily Calibration Test Data and Results	230	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Instrument span [2]				13	F13.3
		37	Reference value [2]				13	F13.3
		50	Measured value [2]				13	F13.3
		63	Results (calibration error or |R-A|)		%,ppm	0.0-100.0	5	F5.1
		68	Alternative performance specification (APS) flag[3]			0,1	1	I1
		69	[Reserved]				2	
		71	Calibration gas or reference signal level (Z-zero, M-mid, H-high)			Z,M,H	1	A1
		72	Span scale (H-high, L-low)			H,L	1	A1
						Total Record Length	72	
Flow Daily Interference Check Results	231	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Status (P-pass, F-fail)			P,F	1	A1
		25	[Reserved]				2	
						Total Record Length	26	

[2] Report span, reference values, and measured values in calibration span units defined in RT 530, column 62.

[3] If an alternative performance specification (|R-A|) is used for SO_2 or NO_x low emitters or for low-span DP-type flow monitors, according to section 3 of Appendix A to Part 75, a 1 is reported; a zero is reported otherwise. For CO_2 or O_2 |R-A| is the normal calculation method; therefore, a 0 (zero) should always be reported for CO_2 and O_2 and there is no alternative specification.

TABLE 2: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES

MONITORING DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
REFERENCE METHOD BACKUP QA DATA								
Hourly Pollutant and Diluent Concentration Data from RM Backup Analyzers	260	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Reference method component ID				3	A3
		13	Reference method monitoring system ID				3	A3
		16	Parameter monitored (SO2, NOX, CO2, O2)				4	A4
		20	Run number				2	I2
		22	Date		YYMMDD		6	I6
		28	Hour		HH	00-23	2	I2
		30	Unadjusted (raw) average pollutant or diluent concentration for the hour		%, ppm		7	F7.2
		37	Adjusted average pollutant or diluent concentration for the hour		%, ppm		7	F7.2
					Total Record Length		43	

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MONITORING DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
Quality Assurance Run Data for Reference Method Analyzers or Systems Used as Backup CEMS	261	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Reference method component ID				3	A3
		13	Reference method monitoring system ID				3	A3
		16	Run number				2	I2
		18	RM run start date		YYMMDD		6	I6
		24	RM run start hour		HH	00-23	2	I2
		26	RM run end date		YYMMDD		6	I6
		32	Rm run end hour		HH	00-23	2	I2
		34	Type of analyzer/system			EXT, DIL	3	A3
		37	Moisture basis of RM analysis			WET, DRY	3	A3
		40	Instrument span (as defined in App A, Part 60)				5	I5
		45	Dilution factor				5	I5
		50	Reference zero gas concentration				7	F7.2
		57	Initial (pre-test) calibration response--zero gas				7	F7.2
		64	Pre-test calibration error--zero gas (% of span)		%		5	F5.1
		69	Reference mid-level gas concentration				7	F7.2
		76	Initial (pre-test) calibration response--mid gas				7	F7.2
		83	Pre-test calibration error--mid gas (% of span)		%		5	F5.1
		88	Reference high-level gas concentration				7	F7.2
		95	Initial (pre-test) calibration response--high gas				7	F7.2
		102	Pre-test calibration error--high gas (% of span)		%		5	F5.1
		107	Upscale gas used during run (M-mid, H-high)			M,H	1	A1
		108	Pre-run system response--zero gas				7	F7.2
		115	Pre-run system bias (non-dilution) or calibration error (dilution)--zero gas (% of span)		%		5	F5.1
		120	Post-run system response--zero gas				7	F7.2
		127	Post-run system bias (non-dilution) or calibration error (dilution)--zero gas (% of span)		%		5	F5.1
		132	Pre-run system response--upscale gas				7	F7.2
		139	Pre-run system bias (non-dilution) or calibration error (dilution)--upscale gas (% of span)		%		5	F5.1
		144	Post-run system response--upscale gas				7	F7.2
		151	Post-run system bias (non-dilution) or calibration error (dilution)--upscale gas (% of span)		%		5	F5.1
		156	Zero drift (% of span)		%		5	F5.1
		161	Calibration drift (% of span)		%		5	F5.1
		166	Stack gas density adjustment factor				5	F5.3
						Total Record Length	170	

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MONITORING DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
Reference Method Backup Flow Rate Monitor (Run Summary)	262	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Reference method component ID				3	A3
		13	Reference method monitoring system ID				3	A3
		16	Run date		YYMMDD		6	I6
		22	Run hour		HH	00-23	2	I2
		24	Number of traverse points				2	I2
		26	(Square root of $\Delta P)_{avg.}$		in. H_2O		5	F5.2
		31	T_s, stack temperature		°F		4	I4
		35	P_{bar}, barometric pressure, in. Hg		in. Hg		5	F5.2
		40	P_g, stack static pressure, in. H_2O		in. H_2O		5	F5.2
		45	% CO_2 in stack gas, dry basis		%		5	F5.2
		50	% O_2 in stack gas, dry basis		%		5	F5.2
		55	% moisture in stack gas		% H_2O		5	F5.2
		60	M_d, stack gas molecular weight, dry basis		lbs/lbs-mole		5	F5.2
		65	M_s, stack gas molecular weight, wet basis		lbs/lbs-mole		5	F5.2
		70	Pitot tube or probe coefficient				5	F5.3
		75	Date of latest pitot tube or probe calibration		YYMMDD		6	I6
		81	A_s, stack or duct cross-sectional area at test port		ft^2		6	F6.1
		87	Total volumetric flow rate		scfh		10	I10
		97	Average axial velocity		ft/sec		8	F8.3
		105	Reference method probe type				3	A3
					Total Record Length		107	

TABLE 2: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES

UNIT DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
UNIT OPERATING AND CUMULATIVE EMISSIONS DATA								
Unit Operating Parameters	300	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Date		YYMMDD		6	I6
		16	Hour		HH	00-23	2	I2
(Modified)		18	Unit operating time			0.00-1.00	4	F4.2
		22	Gross unit load during unit operation		MWe		6	I6
		28	Steam load during unit operation		1000 lb/hr		6	I6
		34	Load range or operational bin number			00-20	2	I2
		36	Hourly heat input rate during unit operation for all fuels		mmBtu/hr		7	F7.1
		43	Heat input formula ID				3	A3
		46	F-factor for heat input calculation	CEMS Only			10	F10.1
		56	Use of diluent cap for heat input calculation for this hour (Y-cap used)	CEMS Only		Y	1	A1
		57	Total heat input for the hour	Optional	mmBtu		7	F7.1
		64	Type of fuel combusted during the hour[5]				3	A3
						Total Record Length	66	
Quarterly Cumulative Emissions Data	301	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Date of report generation		YYMMDD		6	I6
		16	Quarterly SO_2 tons emitted		ton		10	F10.1
ARP Only		26	Cumulative annual SO_2 tons emitted		ton		10	F10.1
		36	Quarterly average NO_x emission rate		lb/mmBtu		13	F13.3
		49	Cumulative annual average NO_x emission rate		lb/mmBtu		13	F13.3
		62	Quarterly CO_2 tons emitted		ton		10	F10.1
		72	Cumulative annual CO_2 tons emitted		ton		10	F10.1
		82	Quarterly total heat input		mmBtu		10	I10
		92	Cumulative annual total heat input		mmBtu		10	I10
		102	[Reserved]				6	
		108	[Reserved]				6	
		114	Quarterly unit/stack/pipe operating hours		hr		4	I4
		118	Cumulative annual unit/stack/pipe operating hours		hr		4	I4
						Total Record Length	121	

TABLE 2: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES

UNIT DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
UNIT OPERATING AND CUMULATIVE EMISSIONS DATA								
Oil Fuel Flow	302	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
(Modified)		13	Date		YYMMDD		6	I6
		19	Hour		HH	00-23	2	I2
		21	Mass flow rate of oil during oil combustion		lb/hr		10	F10.1
		31	Source of data code for mass oil flow rate [4]			0-6,9	1	I1
		32	Load range or operational bin number			00-20	2	I2
		34	Gross calorific value (GCV) of oil				10	F10.1
		44	[Reserved]				1	
		45	Heat input rate from oil during oil combustion		mmBtu/hr		7	F7.1
		52	Fuel usage time			0.01-1.00	4	F4.2
		56	Type of oil [5]				3	A3
		59	Volumetric flow rate of oil during oil combustion				10	F10.1
		69	Units of measure for volumetric oil flow rate[6]				5	A5
		74	Source of data code for volumetric oil flow rate[4]			0,1,3,5,6,9	1	I1
		75	Density of oil				8	F8.5
		83	Units of measure for density of oil [6]				5	A5
		88	[Reserved]				1	
		89	Flag to indicate multiple or single fuel types combusted (M-multiple, S-single)				1	A1
		90	Type of oil sampling and GCV value used in calculations [7]				2	I2
		92	Type of oil sampling and density value used in calculations [7]				2	I2
					Total Record Length		93	

[4]
0 = Measured data (using a mass flowmeter)
1 = Substitute data using lookback procedures
2 = Mass flowrate derived from volumetric measurement (Column 31 only)
3 = Maximum potential fuel flow rate (simplified missing data procedure for peaking units, only)
4 = Emergency fuel (maximum unit fuel flow rate) (Column 31 only)
5 = Ignitor oil from tank measurements
6 = Uncertified OFFM to measure ignitor oil
9 = Default minimum fuel flow rate

[5] See instructions for allowable codes.

[6] Limited to a Table of Codes: VOLUMETRIC OIL FLOW: SCFH (scf/hr); GALHR (gal/hr); BBLHR (barrels/hr), M3HR (m^3/hr)
DENSITY: LBSCF (lb/scf); LBGAL (lb/gal); LBBBL (lb/barrel), LBM3 (lb/m^3)

[7] Type of oil sampling and value used:
0 = Actual measured value from daily manual sample
1 = Actual measured value from flow proportional/weekly composite sample
2 = Actual measured value from oil tank sample
4 = Highest sampled value in previous calendar year from oil tank sampling (or a higher sampled value, superseding the assumed value)
5 = Highest sampled value in previous calendar year from as delivered sample (or a higher sampled value, superseding the assumed value)
6 = Maximum value allowed by contract (or a higher oil tank sample value, superseding the assumed value)
7 = Maximum value allowed by contract (only if higher than measured oil as delivered sample)
8 = Maximum potential value from Table D-6 for missing data or emergency fuel
10 = Highest sampled value in previous 30 days

TABLE 2: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES

UNIT DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
UNIT OPERATING AND CUMULATIVE EMISSIONS DATA								
Gas Fuel Flow	303	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
(Modified)		13	Date		YYMMDD		6	I6
		19	Hour		HH	00-23	2	I2
		21	Flow rate of gas during gas combustion		100 scfh		10	F10.1
		31	Source of data code for gas flow rate [8]			0-4	1	I1
		32	Load range or operational bin number			00-20	2	I2
		34	Gross calorific value (GCV) of gas		Btu/100 scf		10	F10.1
		44	[Reserved]				1	
		45	Heat input rate from gas during gas combustion		mmBtu/hr		7	F7.1
		52	Fuel usage time			0.01-1.00	4	F4.2
		56	Type of gas [5]				3	A3
		59	Flag to indicate multiple or single fuel types combusted (M-multiple, S-single fuel)			M,S	1	A1
		60	Type of gas sampling and GCV value used in calculations [9]			0-2,4-8,10	2	I2
					Total Record Length		61	
Quarterly Heat Input From Long Term Fuel Flow Measurements for Qualifying Low Mass Emission Units (Modified)	305	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Type of fuel [5]				3	A3
		16	Quarter or reporting period			1-4, 2A,2S	2	A2
		18	Year		YYYY		4	I4
		22	Quarterly or reporting period fuel flow				10	I10
		32	Units of measure for fuel flow [10]				5	A5
		37	Gross calorific value				10	F10.1
		47	Gross calorific value units of measure [11]				8	A8
		55	Total heat input		mmBtu		10	I10
					Total Record Length		64	

[8]
- 0 Hourly Measurement
- 1 Substitute Data Using Lookback Procedures
- 2 Default Minimum Fuel Flow Rate
- 3 Maximum Potential Fuel Flow Rate (simplified missing data procedure for peaking units, only)
- 4 Emergency Fuel (maximum unit fuel flow rate)

[9]
- 0 Actual Measured GCV From Most Recent Monthly Sampling
- 1 Highest of All Sampled Values in Previous Calendar Year (or a higher sampled value, superseding the assumed value)
- 2 Maximum Value Allowed by Contract (or a higher sampled value, superseding the assumed value)
- 4 Actual Measured GCV From Continuous (hourly) Sampling
- 5 Gas Fuel in Lots, as Delivered Sampling: Highest of All Sampled Values in Previous Calendar Year (or a higher sampled value, superseding the assumed value)
- 6 Gas Fuel in Lots, as Delivered Sampling: Maximum Value Allowed by Contract (or a higher sampled value, superseding the assumed value)
- 7 Actual Measured GCV From Daily Sampling
- 8 Missing Data Based on Table D-6 Default
- 10 Actual GCV From Most Recent Shipment or Lot

[10] Limited to a table of codes: LB, SCF, GAL

[11] Limited to a table of codes: BTU/LB, BTU/SCF, BTU/GAL

TABLE 2: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES

UNIT DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
UNIT OPERATING AND CUMULATIVE EMISSIONS DATA								
Cumulative NO_x Mass Emissions Data **ARP LME and Subpart H Only**	307	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Date of report generation		YYYYMMDD		8	I8
		18	Reporting period NO_x tons emitted		ton		10	F10.1
		28	Cumulative ozone season NO_x tons emitted		ton		10	F10.1
		38	Reporting period heat input		mmBtu		10	F10.1
		48	Cumulative ozone season heat input		mmBtu		10	F10.1
		58	Total reporting period operating hours		hr		4	I4
		62	Cumulative ozone season operating hours		hr		5	I5
		67	Cumulative annual NO_x tons emitted		ton		10	F10.1
		77	Cumulative annual total heat input	Subpart H only	mmBtu		10	I10
		87	Cumulative annual unit/stack/pipe operating hours	Subpart H only	hr		4	I4
						Total Record Length	90	
SO2 MASS EMISSIONS DATA								
SO_2 Mass Emissions Data **ARP Only**	310	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Date		YYMMDD		6	I6
		16	Hour		HH	00-23	2	I2
		18	SO_2 mass emission rate for the hour		lb/hr		7	F7.1
		25	SO_2 mass emission rate during unit operation based on adjusted values		lb/hr		7	F7.1
		32	Formula ID from monitoring plan for hourly SO_2 emissions				3	A3
		35	Total SO_2 mass emissions for the hour	Optional	lb		7	F7.1
						Total Record Length	41	

TABLE 2: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES

UNIT DATA

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
SO2 MASS EMISSIONS DATA								
SO_2 Mass Emissions Alternative Estimation Parameters for Oil (Modified) **ARP Only**	313	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Date		YYMMDD		6	I6
		19	Hour		HH	00-23	2	I2
		21	Sulfur content of oil sample used to calculate SO_2 mass emission rate		%	.01-5.0	5	F5.2
		26	[Reserved]				3	
		29	[Reserved]				1	
		30	SO_2 mass emission rate from oil during oil combustion		lb/hr		7	F7.1
		37	Total SO_2 mass emissions from oil	Optional	lb		7	F7.1
		44	Type of sulfur sampling and value used in calculations [12]			1-9	2	I2
						Total Record Length	45	
SO_2 Mass Emissions Alternative Estimation Parameters for Gas (Modified) **ARP Only**	314	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Date		YYMMDD		6	I6
		19	Hour		HH	00-23	2	I2
		21	Sulfur content of gas sample used to calculate SO_2 mass emission rate		grains/100 scf		8	F8.1
		29	[Reserved]				1	
		30	Default SO_2 emission rate		lb/mmBtu		7	F7.5
		37	SO_2 mass emission rate from gas during gas combustion		lb/hr		8	F8.5
		45	Total SO_2 mass emissions from gas	Optional	lb		7	F7.1
		52	Type of sulfur sampling and value used in calculations [12]			0,3,5, 7-10	2	I2
						Total Record Length	53	

[12] Type of data for sulfur content:
- 0 = Actual measured hourly average sample from GCH (gas)
- 1 = Actual measured value from oil composite sample
- 2 = Actual measured value from oil tank sample
- 3 = Highest daily sample in 30 daily samples (gas or oil)
- 4 = Highest sampled value in previous calendar year from oil tank sampling (or a higher sampled value, superseding the assumed value)
- 5 = Highest sampled value in previous calendar year from as delivered sample (gas or oil) (or a higher sampled value, superseding the assumed value)
- 6 = Maximum value allowed by contract (or a higher oil tank sample value, superseding the assumed value)
- 7 = Maximum value allowed by contract (or a higher sample value, superseding the assumed value)
- 8 = Maximum potential value from Table D-6 for oil or gas for missing data or emergency fuel
- 9 = Actual measured value from daily sample
- 10 = Actual measured value from most recent shipment or lot (gas)

TABLE 2: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES

UNIT DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
NO_x EMISSIONS DATA								
NO_x Emission Rate Data	320	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Date		YYMMDD		6	I6
(Modified)		19	Hour		HH	00-23	2	I2
		21	Percent monitor data availability for NO_x emission rate calculations		%	0.0-100.0	5	F5.1
		26	F-factor converting NO_x concentrations to emission rates				10	F10.1
		36	Average NO_x emission rate for the hour		lb/mmBtu		6	F6.3
		42	Adjusted average NO_x emission rate for the hour		lb/mmBtu		6	F6.3
		48	Load range or operational bin number			00-10	2	I2
		50	Formula ID from monitoring plan for hourly NO_x emission rate				3	A3
		53	Method of determination code			01-12, 14,21,22,23, 25,54,55	2	I2
					Total Record Length		54	
NO_x Emission Rate Alternative Estimation Parameters for Oil and Gas	323	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Date		YYMMDD		6	I6
		19	Hour		HH	00-23	2	I2
(Modified)		21	Parameters status flag (Y-in spec, N-out of spec, X-parameters data missing or invalid, W-operation above highest tested heat input point, Z-operation below lowest tested heat input point, E-Emergency Fuel, U-Uncontrolled)			Y,N,X, W,Z,E,U	1	A1
		22	Average NO_x emission rate for the hour		lb/mmBtu		6	F6.3
		28	[Reserved]				6	
		34	[Reserved]				6	
		40	Segment ID of correlation curve				3	A3
					Total Record Length		42	

TABLE 2: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES

UNIT DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
NO_x EMISSIONS DATA								
NO_x Emission Rate Estimation Based on Appendix E (Modified)	324	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	NO_x monitoring system ID				3	A3
		13	Fuel flow monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Parameters status flag (Y-in spec, N-out of spec, X-parameters data missing or invalid, W-operation above highest tested heat input point, Z-operation below lowest tested heat input point, E-Emergency fuel, U-Uncontrolled)			Y,N,X, W,Z,E,U	1	A1
		25	Average NO_x emission rate for the hour for fuel type		lb/mmBtu		6	F6.3
		31	NO_x mass emission rate for the hour for fuel type		lb/hr		11	F11.2
		42	Segment ID of correlation curve				3	A3
		45	Flag to indicate multiple or single fuel types combusted (M-multiple, S-single)			M,S	1	A1
					Total Record Length		45	
NO_x Emission Rate Estimation Based on Appendix E for Multiple Fuel Hours	325	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Date		YYMMDD		6	I6
		16	Hour		HH	00-23	2	I2
		18	Average NO_x emission rate for all fuels during multiple fuel hours		lb/mmBtu		6	F6.3
					Total Record Length		23	
NO_x Mass Emissions **Subpart H Only**	328	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Date		YYMMDD		6	I6
		16	Hour		HH	00-23	2	I2
		18	Unit operating time			0.00-1.00	4	F4.2
		22	NO_x mass emission rate during unit operation	Optional	lb/hr		10	F10.1
		32	Total NO_x mass emissions for the hour		lb		10	F10.1
		42	Formula ID from monitoring plan for total NO_x mass				3	A3
		45	NO_x methodology for the hour [5]				10	A10
		55	Heat input rate methodology for the hour [5]				10	A10
					Total Record Length		64	

TABLE 2: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES

UNIT DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
CO2 MASS EMISSIONS DATA								
CO_2 Mass Emissions Data **ARP Only**	330	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Date		YYMMDD		6	I6
		16	Hour		HH	00-23	2	I2
		18	CO_2 mass emission rate for the hour		ton/hr		10	F10.1
		28	Formula ID from monitoring plan for hourly CO_2 mass emission rate				3	A3
		31	[Reserved]				2	
		33	Total CO_2 mass emissions for the hour	Optional	ton		10	F10.1
		43	Use of diluent cap value for CO_2 calculation for this hour (Y-cap used)	CEMS only		Y	1	A1
						Total Record Length	43	
CO_2 Mass Emissions Estimation Parameters **ARP Only**	331	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Date		YYMMDD		6	I6
		16	Total daily combustion-related CO_2 mass emissions adjusted for CO_2 retained in flyash		ton		10	F10.1
		26	Total daily sorbent-related CO_2 mass emissions		ton		10	F10.1
		36	Total daily CO_2 mass emissions		ton		10	F10.1
						Total Record Length	45	

TABLE 2: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES

UNIT DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
QUALIFYING LOW MASS EMISSIONS UNIT DATA								
Hourly Emissions Data for Qualifying Low Mass Emissions Units	360	1	Record type code				3	I3
		4	Unit ID				6	A6
		10	Date		YYMMDD		6	I6
LME Only		16	Hour		HH	00-23	2	I2
		18	Unit operating time [13]			0.0-1.00	4	F4.2
(Modified)		22	Gross unit load during unit operation		MWe		6	I6
		28	Steam load		1000 lb/hr		6	I6
		34	Total hourly heat input (from all fuels)		mmBtu		7	F7.1
		41	Fuel type [14]				3	A3
		44	SO_2 mass emissions	ARP only	lb		6	F6.1
		50	NO_x mass emissions		lb		6	F6.1
		56	CO_2 mass emissions	ARP only	ton		9	F9.1
		65	Control status (C-controlled, U-uncontrolled)			C,U	1	A1
		66	NO_x methodology for the hour [5]				10	A10
		76	Heat input rate methodology for the hour [5]				10	A10
		86	Base Load or Peak Load hour			B,P	1	A1
					Total Record Length		86	

[13] For LME units using long term fuel flow and reporting RT 305, report 1.00 for each hour in which any operation occurred.

[14] See instructions for allowable codes. If multiple fuels are burned, report the fuel used to determine mass emissions (fuel with the highest SO_2, CO_2, and/or NO_x emission factor). See §§ 75.19(c)(3)(i), (4)(i), and (5)(i).

TABLE 3: MONITORING PLAN FILE RECORD STRUCTURES

MONITORING PLAN INFORMATION								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
Stack/Pipe Header Definition Table	503	1	Record type code				3	I3
		4	Stack/Pipe ID				6	A6
		10	Stack/Pipe description or name				20	A20
		30	Unit ID for associated unit				6	A6
		36	[Reserved]				1	
		37	[Reserved]				6	
		43	[Reserved]				6	
		49	Activation date		YYMMDD		6	I6
		55	Retirement date		YYMMDD		6	I6
		61	Bypass stack flag (B-bypass)			B	1	A1
		62	Stack exit height above ground level		ft		4	I4
		66	Ground level elevation above sea level		ft		5	I5
		71	Inside cross-sectional area at flue exit		ft^2		4	I4
		75	Inside cross-sectional area at flow monitor location		ft^2		4	I4
						Total Record Length	78	
Unit Information	504	1	Record type code				3	I3
		4	Unit ID				6	A6
		10	Unit type [5]				3	A3
(Modified)		13	Maximum hourly heat input capacity		mmBtu		7	F7.1
		20	Date of first commercial operation		YYYYMMDD		8	I8
		28	Unit retirement date		YYYYMMDD		8	I8
		36	Stack exit height above ground level		ft		4	I4
		40	Ground level elevation above sea level		ft		5	I5
		45	Inside cross-sectional area at flue exit		ft^2		4	I4
		49	Inside cross-sectional area at flow monitor location		ft^2		4	I4
		53	Non load-based unit identifier				1	A1
						Total Record Length	53	
Program Indicator for Report	505	1	Record type code				3	I3
		4	Unit ID				6	A6
(Modified)		10	Program/Reporting requirements for which EDR is submitted [15]				10	A10
		20	Unit classification [5]				2	A2
		22	Reporting frequency (OS-ozone season, Q-quarterly)			OS,Q	2	A2
		24	Program participation date		YYYYMMDD		8	I8
		32	State regulation code (per State instructions)	Subpart H only			10	A10
		42	State or local regulatory agency code (see instructions)	Subpart H only			4	A4
						Total Record Length	45	

[15] Available codes are: ARP, OTC-SUBH, SUBH,

TABLE 3: MONITORING PLAN FILE RECORD STRUCTURES

MONITORING PLAN INFORMATION								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
EIA Cross Reference Information	506	1	Record type code				3	I3
		4	Unit ID				6	A6
(Modified)		10	Acid Rain Program or Subpart H monitoring location ID				6	A6
		16	EIA boiler ID				5	A5
		21	EIA flue ID				5	A5
		26	EIA reporting year				4	I4
		30	EIA reporting indicator (N-not reporting EIA forms)			N	1	A1
		31	[Reserved]				6	
		37	EIA facility number				6	I6
					Total Record Length		42	
Fuel Usage Data to Qualify as a Peaking Unit or an Acid Rain Program Gas-Fired Unit	507	1	Record type code				3	I3
		4	Unit ID				6	A6
		10	Current calendar year or ozone season		YYYY		4	I4
		14	Ozone Season or Year 1		YYYY		4	I4
		18	Ozone Season or Year 1 type (P-projected, A-actual, D-operating data)			P,A,D	1	A1
		19	Ozone Season or Year 1 % capacity for peaking units or % heat input for gaseous fuel		%	0.0-100.0	5	F5.1
		24	Ozone Season or Year 2		YYYY		4	I4
		28	Ozone Season or Year 2 type (P-projected, A-actual, D-operating data)			P,A,D	1	A1
		29	Ozone Season or Year 2 % capacity for peaking units or % heat input from gaseous fuel		%	0.0-100.0	5	F5.1
		34	Ozone Season or Year 3		YYYY		4	I4
		38	Ozone Season or Year 3 type (P-projected, A-actual, D-operating data)			P,A,D	1	A1
		39	Ozone Season or Year 3 % capacity for peaking units or % heat input from gaseous fuel		%	0.0-100.0	5	F5.1
		44	Three ozone season or year average annual capacity for peaking units or % heat input from gaseous fuel		%	0.0-100.0	5	F5.1
		49	Type of qualification (GF-gas-fired unit, PK-peaking unit, SK-ozone season peaking unit)			GF,PK, SK	2	A2
		51	Method of qualifying as a peaking unit or as a gas-fired unit per § 72.2 [5]				3	A3
					Total Record Length		53	
Subpart H Reporting Frequency Change	508	1	Record type code				3	I3
		4	Stack/Unit/Pipe ID				6	A6
		10	New reporting frequency (OS-ozone season only, Q-quarterly)			OS, Q	2	A2
		12	Begin date of new reporting frequency		YYYYMMDD		8	I8
Subpart H Only		20	[Reserved]				8	
		28	[Reserved]				1	
					Total Record Length		28	

TABLE 3: MONITORING PLAN FILE RECORD STRUCTURES

MONITORING PLAN INFORMATION								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
Monitoring Systems/ Analytical Components Table (Modified)	510	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Status (A-add, C-correct, D-delete, U-unchanged)			A,C,D,U	1	A1
		17	System parameter monitored [16]				4	A4
		21	Primary/backup designation [17]				2	A2
		23	Component type code [18]				4	A4
		27	Sample acquisition method [5]				3	A3
		30	Manufacturer				25	A25
		55	Model/version				15	A15
		70	Serial number				20	A20
		90	[Reserved]				6	
		96	[Reserved]				4	
		100	First date system reported data		YYYYMMDD		8	I8
		108	Last date system reported data		YYYYMMDD		8	I8
					Total Record Length		115	
Formula Table (Modified)	520	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Submission status (A-add, C-correct, D-delete, U-unchanged)			A,C,D,U	1	A1
		11	Formula ID				3	A3
		14	Parameter monitored [5]				4	A4
		18	Formula code [5]				5	A5
		23	Formula text				200	A200
					Total Record Length		222	

[16] Limited to a table of codes: System Parameter: CO2, FLOW, GAS, H2O, LTGS, LTOL, NOX, NOXC, O2, OILM, OILV, OP, SO2

[17] Limited to a table of codes: Primary/Backup Designation: P-primary, B-regular non-redundant backup, DB-data backup, RB-redundant backup, RM-reference method backup, CI-certified monitor at control device inlet

[18] Limited to a table of codes: Component Type: BGFF, BOFF, CALR, CO2, CO2A, CO2H, CO2L, DAHS, DL, DP, FLC, FLOW, GCH, GFFM, H2O, NOX, NOXA, NOXH, NOXL, O2D, O2DA, O2DH, O2DL, O2W, O2WA, O2WD, O2WH, O2WL, OFFM, OP, PLC, PRB, PRES, SO2, SO2A, SO2H, SO2L, TANK, TEMP

TABLE 3: MONITORING PLAN FILE RECORD STRUCTURES

MONITORING PLAN INFORMATION								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
Span Table	530	1	Record type code				3	I3
(Modified)		4	Unit/Stack ID				6	A6
		10	Parameter monitored [5]				4	A4
		14	Scale (H-high, L-low)			H,L	1	A1
		15	Method for calculating MPC/MEC/MPF (F-formula, HD-historical data, PL-permit limit, OL-other limit, TR-test results, TB-table in Part 75, ME-manufacturer's estimate, GS-gas fired only)			F,HD, OL,PL, ME,TR, TB,GS	2	A2
		17	MPC/MEC/MPF [19]				13	F13.3
		30	Maximum potential NO_x emission rate		lb/mmBtu		6	F6.3
		36	Span value in units of daily calibration				13	F13.3
		49	Full scale range in units of daily calibration				13	F13.3
		62	Daily calibration units of measure [20]				5	A5
		67	[Reserved]				1	
		68	Span effective date		YYMMDD		6	I6
		74	Span effective hour		HH		2	I2
		76	Span inactivation date		YYMMDD		6	I6
		82	Span inactivation hour		HH		2	I2
		84	Dual spans required (D-dual ranges required/installed, O-dual ranges required/use of optional default high range value elected) (Blank if not applicable)			D,O	1	A1
		85	Default high range value				5	I5
		90	Flow rate span value in SCFH		scfh		9	I9
		99	Flow rate full scale value in SCFH		scfh		9	I9
						Total Record Length	107	

[19] Provide SO_2 and NO_x MPC/MEC in ppm, rounded to the nearest whole number. Provide CO_2 MPC in %. Provide flow maximum potential flowrate (MPF) in scfh.

[20] For SO_2 and NO_x use PPM. For CO_2 or O_2 use %. For flow use units corresponding to calibration as follows: ACFH, ACFM, AFPM, INH2O, KACFH, KACFM, KAFPM, KSCFH, KSCFM, KSFPM, MACFH, MSCFH, SCFH, SCFM, SFPM, AMSEC, SMSEC.

TABLE 3: MONITORING PLAN FILE RECORD STRUCTURES

MONITORING PLAN INFORMATION								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
Maximums, Minimums, Defaults and Constants (Modified)	531	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Parameter [5]				4	A4
		14	Value of default, maximum, minimum or constant				13	F13.3
		27	Units of measure [21]				7	A7
		34	Purpose or intended use [5]				3	A3
		37	Type of fuel [5]				3	A3
		40	Indicator of use for controlled/uncontrolled hours (A-any hour, C-controlled, U-uncontrolled)			A,C,U	1	A1
		41	Source of value [5]				4	A4
		45	Value effective date		YYYYMMDD		8	I8
		53	Value effective hour		HH		2	I2
		55	Value no longer effective date		YYYYMMDD		8	I8
		63	Value no longer effective hour		HH		2	I2
		65	SO_2 emission factor	ARP only	lb/mmBtu		6	F6.4
						Total Record Length	70	
Unit and Stack Operating Load Data (Modified)	535	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Load units (MW-MWe, ST-1000lb steam)			MW,ST	2	A2
		12	Maximum hourly gross load				6	I6
		18	[Reserved]				1	
		19	Exemption from three-level flow RATAs (P-peaking unit, B-bypass stack, S-single load testing only, approved by the State or EPA, 2-two-level testing for cert/recert and QA, approved by State or EPA)			B,P,S, 2	1	A1
						Total Record Length	19	
Range of Operation and Normal Operating Load or Level (Modified)	536	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Upper boundary of range of operation		MWe, 1000 lb/hr, ft/sec		6	I6
		16	Lower boundary of range of operation		MWe, 1000 lb/hr, ft/sec		6	I6
		22	Two most frequently-used load or operating levels			L,M,H	3	A3
		25	Designated normal load or operating level			L,M,H	1	A1
		26	Second designated normal load or operating level	Optional		L,M,H	1	A1
		27	Date of historical load analysis or operating level determination (activation date)		YYYYMMDD		8	I8
		35	Inactivation date		YYYYMMDD		8	I8
						Total Record Length	42	

[21] Limited to a table of codes: %, %H2O, BBLHR, GALHR, HSCF, LBHR, LBMMBTU, M3HR, MMBTUHR, PPM, SCFH, TNMMBTU

TABLE 3: MONITORING PLAN FILE RECORD STRUCTURES

MONITORING PLAN INFORMATION								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
Fuel Flowmeter Data (Modified)	540	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Parameter monitored			GAS, LTGS, LTOL, OILM, OILV	4	A4
		17	Type of fuel [5]				3	A3
		20	Maximum system fuel flow rate				10	F10.1
		30	Units of measure for maximum fuel flow rate [22]				5	A5
		35	Source of maximum rate (URV-upper range value, UMX-unit max)			URV, UMX	3	A3
		38	Initial accuracy test method [5]				11	A11
		49	[Reserved]				11	
		60	Submission status (A-add, C-correct, D-delete, U-unchanged)			A,C,D,U	1	A1
					Total Record Length		60	
Reasons for Monitoring System Downtime or Missing Parameter (Optional)	550	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Parameter [5]				4	A4
		14	Monitoring system ID				3	A3
		17	Begin date		YYMMDD		6	I6
		23	Begin hour		HH	00-23	2	I2
		25	End date		YYMMDD		6	I6
		31	End hour		HH	00-23	2	I2
		33	Missing data reason code [5]			1-99	2	I2
		35	Missing data description [23]				75	A75
		110	Corrective action description				75	A75
					Total Record Length		184	
Monitoring System Re-certification, Maintenance, or Other Events	556	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Event code [5]			1-999	3	I3
		19	Code for required test [5]			1-99	2	I2
		21	Date of event		YYYYMMDD		8	I8
		29	Hour of event		HH	00-23	2	I2
		31	Beginning of conditionally valid period (probationary calibration error test) date		YYYYMMDD		8	I8
		39	Beginning of conditionally valid period (probationary calibration error test) hour		HH	00-23	2	I2
		41	Date that last test is successfully completed		YYYYMMDD		8	I8
		49	Hour that last test is successfully completed		HH	00-23	2	I2
		51	Indicator that conditionally valid data were reported at end of quarter			C	1	A1
					Total Record Length		51	

[22] For volumetric flow meters for oil use SCFH (scf/hr); GALHR (gal/hr); BBLHR (barrels/hr); M3HR (M^3/hr).
For mass of oil flow meters use LBHR.
For gas flow meters use HSCF (for 100 scfh).

[23] Optional field. Provide information if code does not adequately explain reason or event or if code 99 (OTHER) is used.

TABLE 3: MONITORING PLAN FILE RECORD STRUCTURES

MONITORING PLAN INFORMATION								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
Appendix E NO_x Correlation Curve Segments (Modified)	560	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Test date		YYYYMMDD		8	I8
		18	Test number				2	I2
		20	Operating level			0-99	2	I2
		22	Segment ID				3	A3
		25	NO_x monitoring system ID				3	A3
		28	Heat input rate #1 (low)		mmBtu/hr		7	F7.1
		35	Heat input rate #2 (high)		mmBtu/hr		7	F7.1
		42	NO_x emission rate #1		lb/mmBtu		6	F6.3
		48	NO_x emission rate #2		lb/mmBtu		6	F6.3
		54	Type of fuel [5]				3	A3
		57	[Reserved]				8	
						Total Record Length	64	
Monitoring Methodology Information (Modified)	585	1	Record type code				3	I3
		4	Unit ID				6	A6
		10	Parameter [5]				4	A4
		14	Monitoring methodology [5]				10	A10
		24	Type of fuel associated with methodology [5]				3	A3
		27	Primary/secondary methodology indicator			P,S	1	A1
		28	Missing data approach for methodology [5]				6	A6
		34	Methodology start date		YYYYMMDD		8	I8
		42	Methodology end date		YYYYMMDD		8	I8
						Total Record Length	49	
Control Equipment Information (Modified)	586	1	Record type code				3	I3
		4	Unit ID				6	A6
		10	Parameter (NOX, SO2, PART)				4	A4
		14	Control equipment code [5]				6	A6
		20	Primary/secondary controls indicator			P,S	1	A1
		21	Original installation (O-original)			O	1	A1
		22	Controls install date		YYYYMMDD		8	I8
		30	Controls optimization date		YYYYMMDD		8	I8
		38	Controls retirement date		YYYYMMDD		8	I8
		46	Seasonal controls indicator (S-ozone season only)	Subpart H only		S	1	A1
						Total Record Length	46	
Unit Fuel Type (Modified)	587	1	Record type code				3	I3
		4	Unit ID				6	A6
		10	Fuel types combusted [5]				3	A3
		13	Fuel type start date		YYYYMMDD		8	I8
		21	Fuel type end date		YYYYMMDD		8	I8
		29	Primary/secondary/emergency/startup fuel indicator			E,I,P,S	1	A1
		30	Ozone season fuel switching flag (S-burned during ozone season for ozone control)	Subpart H only		S	1	A1
		31	Demonstration method to qualify for monthly fuel sampling for GCV			GHS, GGC, GOC	3	A3
		34	Demonstration method to qualify for daily or annual fuel sampling for %S	ARP only		SHS, SGC	3	A3
						Total Record Length	36	

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
CALIBRATION/ERROR TESTS								
7-Day Calibration Error Test Data and Results	600	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Instrument span				13	F13.3
		37	Reference value				13	F13.3
		50	Measured value				13	F13.3
		63	Results (calibration error or |R-A|)		%, ppm	0.0-100.0	5	F5.1
		68	Alternative performance specification (APS) flag[3]			0,1	1	I1
		69	Reference signal or calibration gas level (Z-zero, M-mid, H-high)			Z,M,H	1	A1
		70	Span scale (H-high, L-low)			H,L	1	A1
		71	Test number				2	I2
		73	Reason for test (C-initial cert, D-diagnostic, R-recert)			C,D,R	2	A2
						Total Record Length	74	
LINEARITY CHECKS								
Linearity Check Data	601	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Time		HHMM	0000-2359	4	I4
		26	Instrument span				13	F13.3
		39	Reference value				13	F13.3
		52	Measured value				13	F13.3
		65	Calibration gas level (Z-zero, L-low, M-mid, H-high)			Z,L,M,H	1	A1
		66	Span scale (H-high, L-low)			H,L	1	A1
		67	Test number				2	I2
		69	Indicator of aborted test (A-aborted test)			A	1	A1
						Total Record Length	69	
Linearity Check Results	602	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Instrument span				13	F13.3
		35	Mean of reference values				13	F13.3
		48	Mean of measured values				13	F13.3
		61	Results (linearity error or |R-A|)		%, ppm	0.0-100.0	5	F5.1
		66	Alternative performance specification (APS) flag [3]			0,1	1	I1
		67	[Reserved]				4	
		71	Calibration gas level (Z-zero, L-low, M-mid, H-high)			Z,L,M,H	1	A1
		72	Span scale (H-high, L-low)			H,L	1	A1
		73	Test number				2	I2
		75	Reason for test (C-initial cert, D-diagnostic, R-recert, Q-QA, G-grace period QA)			C,D,R,Q, RG,RQ,G	2	A2
						Total Record Length	76	

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
LEAK CHECKS								
Flow Leak Check Results	603	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Status (P-pass, F-fail)			P,F	1	A1
		25	[Reserved]				4	
		29	Reason for test (D-diagnostic, Q-QA, G-grace period QA)			D,Q,G	2	A2
						Total Record Length	30	
FLOW/LOAD CHECKS								
Reference Data for Flow-to-Load Ratio or Gross Heat Rate Evaluation (Modified)	605	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Reference flow RATA end date		YYYYMMDD		8	I8
		21	Reference RATA end time		HHMM	0000-2359	4	I4
		25	Test number				2	I2
		27	Average gross unit load (MWe or Steam)		MWe, 1000 lb/hr steam		6	I6
		33	Operating level (L-low, M-mid, H-high) (N-normal, for peaking units only)			L,M,H,N	1	A1
		34	Average reference method flow rate during reference flow RATA		scfh		10	I10
		44	Reference flow/load ratio				6	F6.2
		50	Average hourly heat input rate during RATA		mmBtu/hr		7	F7.1
		57	Reference gross heat rate (GHR) value		Btu/kw-hr, Btu/lb steam		6	I6
		63	Separate reference ratios calculated for each multiple stack			S	1	A1
						Total Record Length	63	

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
FLOW/LOAD CHECKS								
Quarterly Flow-to-Load Ratio or Gross Heat Rate Check	606	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Calendar quarter and year		QYYYY		5	I5
		18	Test basis indicator (Q-flow-to-load ratio; H-gross heat rate)			Q,H	1	A1
		19	Bias adjusted flow rates used (Y,N)			Y,N	1	A1
		20	Average absolute % difference between reference ratio (or GHR) and hourly ratios (or GHR values), E_f		%	0.0-100.0	5	F5.1
		25	Result (P-pass, F-fail, N-<168 hours within ± 10% of average load, E-<168 hours for data analysis after exempted hours removed)			P,F,N,E	1	A1
		26	Number of hours used in quarterly flow-to-load or GHR analysis		hrs		4	I4
		30	Number of hours excluded for different type of fuel		hrs		4	I4
		34	Number of hours excluded for load ramping up or down		hrs		4	I4
		38	Number of hours excluded for scrubber bypass		hrs		4	I4
		42	Number of excluded hours preceding a normal load flow RATA		hrs		4	I4
		46	Number of excluded hours preceding a successful diagnostic test, following a documented monitor repair, or following a major component replacement		hrs		4	I4
		50	Number of hours excluded for flue gases discharging simultaneously through a main stack and bypass stack		hrs		4	I4
						Total Record Length	53	

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
RATA/BIAS TESTS								
RATA and Bias Test Data (Modified)	610	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Run start date		YYMMDD		6	I6
		19	Run start time		HHMM	0000-2359	4	I4
		23	Run end date		YYMMDD		6	I6
		29	Run end time		HHMM	0000-2359	4	I4
		33	Units of measure (1-ppm, 2-lb/mmBtu, 3-scfh, 4-%CO_2, 5-%O_2 6-mmBtu/hr (OTC NBP only), 7-%H_20)			1-7	1	I1
		34	Value from CEM system being tested				13	F13.3
		47	Value from reference method, adjusted as necessary for moisture and/or calibration bias				13	F13.3
		60	Run number				2	I2
		62	RATA run status flag 0 - RATA used, run not used 1 - run data used in calculating relative accuracy and bias 9 - test aborted			0,1,9	1	I1
		63	Operating level (L-low, M-mid, H-high) (Use N-normal for peaking units only)			L,M,H,N	1	A1
		64	Gross unit load or average velocity at operating level		MWe, 1000 lbs/hr ft/sec		6	I6
		70	Test number				2	I2
					Total Record Length		71	

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
RATA/BIAS TESTS								
RATA and Bias Test Results (Modified)	611	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	RATA end date		YYMMDD		6	I6
		19	RATA end time		HHMM	0000-2359	4	I4
		23	Reference method used [5]				11	A11
		34	Units of measure (1-ppm, 2-lb/mmBtu, 3-scfh, 4-%CO_2,5-%O_2, 6-mmBtu/hr, 7-%H_20)			1-7	1	I1
		35	Arithmetic mean of CEMS values				13	F13.3
		48	Arithmetic mean of reference method values				13	F13.3
		61	Arithmetic mean of the difference data				13	F13.3
		74	Standard deviation of difference data				13	F13.3
		87	Confidence coefficient				13	F13.3
		100	Relative accuracy				5	F5.2
		105	Tabulated t- value (bias test)				6	F6.3
		111	Bias adjustment factor at this load level				5	F5.3
		116	Operating level (L-low, M-mid, H-high) (Use N-normal, for peaking units only)			L,M,H,N	1	A1
		117	Average gross unit load (MWe or steam) or average velocity at operating level		MWe, 1000 lbs/hr ft/sec		6	I6
		123	[Reserved]				4	
		127	Indication of normal load (or operating level) (N-normal, otherwise, blank)			N	1	A1
		128	Alternative performance specification (APS) flag [6]			0,1	1	I1
		129	Test number				2	I2
		131	Reason for RATA (C-initial cert, D-diagnostic, R-recert, Q-QA, G-grace period QA)			C,D,R,Q, RQ,G,QD	2	A2
		133	Number of load (or operating) levels comprising test (1 for gas RATAs, 1-3 for flow or heat input RATAs)			1-3	1	I1
		134	System bias adjustment factor for a multiple load (multiple level) flow RATA				5	F5.3
						Total Record Length	138	

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
RATA/BIAS TESTS								
Reference Method Supporting Data for Flow RATA Tests (Methods 2, 2F, 2G, and 2H) Run Level Data	614	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Test number				2	I2
		15	Operating level			H,M,L,N	1	A1
		16	Run number				2	I2
		18	Run start date		YYYYMMDD		8	I8
		26	Run start time		HHMM	0000-2359	4	I4
		30	Run end date		YYYYMMDD		8	I8
		38	Run end time		HHMM	0000-2359	4	I4
		42	Flow rate reference method(s) used [5]			2F,2G, 2FH,2GH, M2H	3	A3
		45	Number of traverse points				2	I2
		47	P_{bar}, barometric pressure, in. Hg		in. Hg		5	F5.2
		52	P_g, stack static pressure, in. H_2O		in. H_2O		5	F5.2
		57	% CO_2 in stack gas, dry basis		%		5	F5.1
		62	% O_2 in stack gas, dry basis		%		5	F5.1
		67	CO_2 and O_2 reference method			3,3A	4	A4
		71	% moisture in stack gas		$\%H_2O$		5	F5.1
		76	M_d, stack gas molecular weight, dry basis		lbs/lbs-mole		5	F5.2
		81	M_s, stack gas molecular weight, wet basis		lbs/lbs-mole		5	F5.2
		86	Stack diameter at test port location		ft		5	F5.2
		91	A_s, stack or duct cross-sectional area at test port		ft^2		6	F6.1
		97	v_S, Average velocity for run, not accounting for wall effects		ft/sec		6	F6.2
		103	v_S, Average velocity for run, accounting for wall effects		ft/sec		6	F6.2
		109	Calculated wall effects adjustment factor (WAF) derived from this test run				6	F6.4
		115	Calculated WAF applied to all runs of this RATA			≥0.9700	6	F6.4
		121	Default WAF applied to all runs of this RATA			0.9900, 0.9950	6	F6.4
		127	Average stack flow rate, wet basis, adjusted if applicable for wall effects		scfh		10	I10
					Total Record Length		136	

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
RATA/BIAS TESTS								
Reference Method Supporting Data for Flow RATA Tests (Methods 2, 2F, 2G, and 2H) Traverse Point Level Data	615	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Test number				2	I2
		15	Operating level			L,M,H,N	1	A1
		16	Run number				2	I2
		18	Reference method probe type			S,P,AS, DA, DAT,SPH	4	A4
		22	Probe ID				11	A11
		33	Pressure measurement device type			MN,MG, ET	2	A2
		35	Method 1 traverse point ID				3	A3
		38	Probe or pitot tube velocity calibration coefficient				5	F5.3
		43	Date of latest probe or pitot tube calibration		YYYYMMDD		8	I8
		51	Average velocity differential pressure at traverse point		in. H_2O		5	F5.3
		56	Average of square roots of velocity differential pressures at traverse point		$(in\ H_2O)^{½}$		5	F5.3
		61	T_s, stack temperature at traverse point		°F		5	F5.1
		66	Exterior Method 1 traverse point identifier			W	1	A1
		67	Number of wall effects measurement points used to derive replacement velocity				2	I2
		69	Yaw angle of flow at traverse point		degrees	-179.9 to +180.0	6	F6.1
		75	Pitch angle of flow at traverse point		degrees	-179.9 to +180.0	6	F6.1
		81	Calculated velocity at traverse point, not accounting for wall effects		ft/sec		6	F6.2
		87	Replacement velocity at traverse point, accounting for wall effects		ft/sec		6	F6.2
						Total Record Length	92	
Reference Method Supporting Data for Flow RATA Tests (Method 2 and 2H, default WAF only)	616	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Test number				2	I2
		15	Operating level		L,M,H,N		1	A1
		16	RATA end date		YYYYMMDD		8	I8
		24	RATA end time		HHMM	0000-2359	4	I4
		28	Default wall effects adjustment factor used			0.9900, 0.9950	6	F6.4
						Total Record Length	33	

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
CYCLE TIME TEST								
Cycle Time Test Data and Results	621	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Start time		HHMM	0000-2359	4	I4
		26	End time		HHMM	0000-2359	4	I4
		30	Component cycle time		min		2	I2
		32	Stable starting monitor value				13	F13.3
		45	Stable ending monitor value				13	F13.3
		58	Calibration gas value				13	F13.3
		71	Calibration gas level (Z-zero, H-high)			Z,H	1	A1
		72	Total or system cycle time [24]		min		2	I2
		74	Reason for test (C-initial cert, D-diagnostic, R-recert)			C,D,R	2	A2
		76	Test number				2	I2
					Total Record Length		77	
ON LINE/OFF LINE CALIBRATION DEMONSTRATION								
Qualifying Test for Off-line Calibration Error Tests	623	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Instrument span				13	F13.3
		37	Reference value				13	F13.3
		50	Measured value				13	F13.3
		63	Results (CE or |R-A|)		%,ppm	0.00-100.0	5	F5.1
		68	Alternative specification flag [3]			0,1	1	I1
		69	[Reserved]				2	
		71	Calibration gas or reference signal level (Z-zero, M-mid, H-high)			Z,M,H	1	A1
		72	Span scale (H-high, L-low)			H,L	1	A1
		73	Off-line/On-line indicator (OFF-unit not operating, ON-unit operating)			ON,OFF	3	A3
		76	Reason for test (C-initial demonstration, D-diagnostic)			C,D	1	A1
		77	Test number				2	I2
					Total Record Length		78	

[24] For NO_x and SO_2 emission rate (lb/mmBtu) systems, report the longer cycle time of the two component analyzers as the system cycle time.

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
MISCELLANEOUS QA TEST/ACTIVITY								
Other QA Activities (Modified)	624	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Parameter				4	A4
		20	Activity/test completion date		YYYYMMDD		8	I8
		28	Activity/test completion hour		HH	00-23	2	I2
		30	QA test activity description				20	A20
		50	Test result (P-pass, F-fail)			P,F	1	A1
		51	Reason for test (C-initial cert, D-diagnostic, R-recert, Q-QA)			C,D,R,Q, RQ	2	A2
		53	QA test code			01,02,03,04, 05,99	2	I2
						Total Record Length	54	
FUEL FLOWMETER ACCURACY CHECKS								
Fuel Flowmeter Accuracy Test (Modified)	627	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Test completion date		YYYYMMDD		8	I8
		24	Test completion hour		HH		2	I2
		26	Reinstallation date		YYYYMMDD		8	I8
		34	Reinstallation hour		HH		2	I2
		36	Accuracy at low fuel flowrate (% of URV)		%		5	F5.1
		41	Highest accuracy at mid fuel flowrate (% of URV)		%		5	F5.1
		46	Accuracy at high fuel flowrate (% of URV)		%		5	F5.1
		51	Test method (L-lab comparison to reference meter, I-in-line comparison to master meter)			I,L	1	A1
		52	Test result (A-aborted, P-pass, F-fail)			A,P,F	1	A1
		53	Test number				2	I2
						Total Record Length	54	
Accuracy Test for Orifice, Nozzle, or Venturi Type Fuel Flowmeters	628	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Test completion date		YYYYMMDD		8	I8
		24	Test completion hour		HH		2	I2
		26	Accuracy determination at low level [25]		%		5	F5.1
		31	Accuracy determination methodology for low level [5]				4	A4
		35	Highest accuracy determination at mid level [25]		%		5	F5.1
		40	Accuracy determination methodology for mid level [5]				4	A4
		44	Accuracy determination at high level [25]		%		5	F5.1
		49	Accuracy determination methodology for high level [5]				4	A4
		53	Test result (A-aborted, P-pass, F-fail)			A,P,F	1	A1
		54	Test number				2	I2
						Total Record Length	55	

[25] Report either: (1) the highest individual accuracy of any of the three transmitters; or (2) the sum of the three transmitter accuracies; or (3) the total fuel flowmeter accuracy calculated according to AGA3 part 1, "General Equations and Uncertainty Guidelines."

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
QUARTERLY FUEL FLOW-TO-LOAD ANALYSIS								
Baseline Data for Fuel-Flow-to-Load Ratio or Gross Heat Rate Check for Fuel Flowmeters (Modified)	629	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Completion date of most recent primary element inspection		YYYYMMDD		8	I8
		21	Completion hour of most recent primary element inspection		HH		2	I2
		23	Completion date of most recent flowmeter or transmitter accuracy test		YYYYMMDD		8	I8
		31	Completion hour of most recent flowmeter or transmitter accuracy test		HH		2	I2
		33	Beginning date of baseline period		YYYYMMDD		8	I8
		41	Beginning hour of baseline period		HH		2	I2
		43	Completion date of baseline period		YYYYMMDD		8	I8
		51	Completion hour of baseline period		HH		2	I2
		53	Average fuel flow rate (100 scfh for gas and lb/hr for oil)				10	F10.1
		63	Average load (MWe or 1000 lb/stream/hr)				6	I6
		69	Baseline fuel-flow-to-load ratio				6	F6.2
		75	Units of fuel-flow-to-load (1-100scfh/MWe, 2-100scfh/klb per hour steam, 3-(lb/hr)/MWe, 4-(lb/hr)/klb per hour steam load, 5-(gal/hr)/MWe, 6-(gal/hr)/klb per hour steam load)			1-6	1	I1
		76	Average hourly heat input rate		mmBtu/hr		7	F7.1
		83	Baseline GHR				6	I6
		89	Units of baseline GHR (1 - Btu/kwh, 2 - Btu/lb steam)			1-2	1	I1
		90	Number of hours excluded due to co-firing or combustion of a different type of fuel		hrs		3	I3
		93	Number of hours excluded due to ramping		hrs		3	I3
		96	Number of excluded hours in lower 25% of range of operation		hrs		3	I3
		99	Flag indicating baseline data collection is in progress and that < 4 calendar quarters have elapsed since quarter of the last flowmeter QA test			B	1	A1
						Total Record Length	99	
Quarterly Fuel-Flow-to-Load Test for Fuel Flowmeters (Modified)	630	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Component ID				3	A3
		16	Calendar quarter and year		QYYYY		5	I5
		21	Test basis indicator (Q-flow-to-load ratio, H-gross heat rate)			Q,H	1	A1
		22	Quarterly average absolute % difference between baseline ratio (or baseline GHR) and hourly quarterly ratios (or GHR values), E_f		%	0.0-100.0	5	F5.1
		27	Result (P-pass, F-fail, N-<168 hours data, E-<168 hours of data after exemptions removed, B-baseline data collection in progress)			P,F,N,E,B	1	A1
		28	Number of hours used in the quarterly data analysis		hrs		4	I4
		32	Number of hours excluded due to co-firing or combustion of a different type of fuel		hrs		4	I4
		36	Number of hours excluded due to ramping		hrs		4	I4
		40	Number of excluded hours in lower 25% of range of operation		hrs		4	I4
						Total Record Length	43	

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
ALTERNATIVE MONITORING PETITION DATA								
Alternative Monitoring System Approval Petition Data	640	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	AMS ID				6	A6
		22	Date		YYMMDD		6	I6
		28	Hour		HH	00-23	2	I2
		30	Hourly test data for alternative monitoring system				13	F13.3
		43	Hourly lognormalized test data for alternative monitoring system				13	F13.3
		56	Hourly test data for reference CEMS				13	F13.3
		69	Fuel type code				2	I2
		71	Operating level (L-low, M-mid, H-high) (Use N-normal for peaking units only)			L,M,H,N	1	A1
		72	Gross unit load		MWe		6	I6
						Total Record Length	77	

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
ALTERNATIVE MONITORING PETITION DATA								
Alternative Monitoring System Approval Petition Results and Statistics	641	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Unit of measure (1-ppm, 2-lb/mmBtu, 3-scfh, 4-%CO_2, 5-%O_2, 6-mmBtu/hr, 7-%H_2O)			1-7	1	A1
		17	Arithmetic mean of AMS values				13	F13.3
		30	Arithmetic mean of CEM values				13	F13.3
		43	Arithmetic mean of differences of paired AMS and CEM values				13	F13.3
		56	Variance of differences				13	F13.3
		69	Variance of measured values of AMS				13	F13.3
		82	Variance of measured values for CEM				13	F13.3
		95	F-statistic				13	F13.3
		108	Critical value of F at 95% confidence level for sample size				13	F13.3
		121	Coefficient of correlation (Pearson's r) of CEM and AMS data				13	F13.3
		134	Shapiro-Wilk test statistic (W) for AMS data				13	F13.3
		147	Shapiro-Wilk test statistic (W) for CEMS data				13	F13.3
		160	Lognormally adjusted data used in final analysis (1-yes, 0-no)			0,1	1	I1
		161	Autocorrelation coefficient (ρ) for AMS data				13	F13.3
		174	Autocorrelation coefficient (ρ) for CEM data				13	F13.3
		187	Autocorrelation coefficient (ρ) for differences of paired AMS and CEM data				13	F13.3
		200	Adjustment for autocorrelation used in final analysis (1-yes, 0-no)			0,1	1	I1
		201	Covariance of alternative monitoring data and associated lag(1) values				13	F13.3
		214	Covariance of continuous emission monitoring data and associated lag(1) values				13	F13.3
		227	Covariance of differences of paired AMS and CEM data				13	F13.3
		240	Standard deviation of AMS data				13	F13.3
		253	Standard deviation of CEM data				13	F13.3
		266	Standard deviation of differences of paired AMS and CEM data				13	F13.3
		279	Standard deviation of lag(1) AMS data				13	F13.3
		292	Standard deviation of lag(1) CEM data				13	F13.3
		305	Standard deviation of lag(1) differences of paired AMS and CEM data				13	F13.3
		318	Variance inflation factor for AMS data				13	F13.3
		331	Variance inflation factor for CEM data				13	F13.3
		344	Variance inflation factor for difference of paired AMS and CEM data				13	F13.3
						Total Record Length	356	

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
LOW MASS EMISSIONS CERTIFICATION DATA								
Qualifying Data for Low Mass Emissions Units Excepted Methodology (Modified)	645	1	Record type code				3	I3
		4	Unit ID				6	A6
		10	Calendar year of application		YYYY		4	I4
		14	Type of qualification			YR,OS	2	A2
		16	Year 1		YYYY		4	I4
		20	Annual or OS measured/projected/estimated NO_x mass emissions for Year 1		ton		4	F4.1
		24	[Reserved]				4	
		28	Annual measured/projected/estimated SO_2 mass emissions for Year 1	ARP only	ton		4	F4.1
		32	[Reserved]	ARP only			4	
		36	Annual or OS operating hours for Year 1		hrs		4	I4
		40	Year 2		YYYY		4	I4
		44	Annual or OS measured/projected/estimated NO_x mass emissions for Year 2		ton		4	F4.1
		48	[Reserved]				4	
		52	Measured/projected/estimated SO_2 mass emissions for Year 2	ARP only	ton		4	F4.1
		56	[Reserved]				4	
		60	Annual or OS operating hours for Year 2		hrs		4	I4
		64	Year 3		YYYY		4	I4
		68	Annual or OS measured/projected/estimated NO_x mass emissions for Year 3		ton		4	F4.1
		72	[Reserved]				4	
		76	Measured/projected/estimated SO_2 mass emissions for Year 3	ARP only	ton		4	F4.1
		80	[Reserved]				4	
		84	Annual or OS operating hours for Year 3		hrs		4	I4
					Total Record Length		87	

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
APPENDIX E AND UNIT SPECIFIC DEFAULT EMISSION RATE TEST DATA								
NO_x Emission Rate Correlation Test Data (Modified)	650	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID for Appendix E NO_x system	Appendix E only			3	A3
		13	Reference method run start date		YYMMDD		6	I6
		19	Reference method run start time		HHMM	0000-2359	4	I4
		23	Reference method run end date		YYMMDD		6	I6
		29	Reference method run end time		HHMM	0000-2359	4	I4
		33	Reference method response time		sec	0-800	3	I3
		36	Value from reference method during run		lb/mmBtu		8	F8.3
		44	Run number				2	I2
		46	Operating level (1-lowest)			1-99	2	I2
		48	Type of fuel combusted [5]				1	A1
		49	Total heat input during the run		mmBtu		7	F7.1
		56	[Reserved]				3	
		59	Hourly heat input rate during run		mmBtu/hr		7	F7.1
		66	Test number				2	I2
		68	Flag to indicate this run used to calculate highest 3-run NO_x emission rate average at any tested load level	LME unit default testing only		H	1	A1
		69	NOx default rate (Highest 3-run average)	LME unit default testing only	lb/mmBtu		6	F6.3
		75	Base-load or Peak-load test	LME unit default testing only		B, P, A	1	A1
		76	NOx default rate for peak load hours	LME unit default testing only			6	F6.3
					Total Record Length		81	
NO_x Emission Rate Correlation Results	651	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID for Appendix E NO_x system				3	A3
		13	Completion date of last run in level		YYMMDD		6	I6
		19	Completion time of last run in level		HHMM	0000-2359	4	I4
		23	Arithmetic mean of reference method values at this level		lb/mmBtu		8	F8.3
		31	F-factor converting NO_x concentrations to emission rates				10	F10.1
		41	Average heat input rate at this level		mmBtu/hr		7	F7.1
		48	Operating level (1-lowest)			1-99	2	I2
		50	Type of fuel combusted [5]				1	A1
		51	Test number				2	I2
					Total Record Length		52	

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
APPENDIX E AND UNIT SPECIFIC DEFAULT EMISSION RATE TEST DATA								
Heat Input from Oil Combusted During Test	652	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID for oil fuel flow system				3	A3
		13	Run start date		YYMMDD		6	I6
		19	Run start time		HHMM	0000-2359	4	I4
		23	Run end date		YYMMDD		6	I6
		29	Run end time		HHMM		4	I4
		33	Run number				2	I2
		35	Mass of oil combusted during run		lb		10	F10.1
		45	Gross calorific value (GCV) of oil				10	F10.1
		55	Heat input from oil during run		mmBtu		7	F7.1
		62	Volume of oil combusted during run				10	F10.1
		72	Units of measure for oil flow [5]				5	A5
		77	Density of oil				8	F8.6
		85	Units of measure for density of oil [5]				5	A5
		90	Test number				2	I2
		92	Units of measure for GCV [5]				6	A6
						Total Record Length	97	
Heat Input from Gas Combusted During Test	653	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID for gas fuel flow system				3	A3
		13	Run start date		YYMMDD		6	I6
		19	Run start time		HHMM	0000-2359	4	I4
		23	Run end date		YYMMDD		6	I6
		29	Run end time		HHMM	0000-2359	4	I4
		33	Volume of gas combusted during run		100 scf		10	F10.1
		43	Gross calorific value (GCV) of gas		Btu/100 scf		10	F10.1
		53	Heat input from gas during run		mmBtu		7	F7.1
		60	Test number				2	I2
						Total Record Length	61	
Unit Group Testing (Modified) **LME Only**	660	1	Record type code				3	I3
		4	Group ID				8	A8
		12	ORIS code or facility ID				6	I6
		18	Plant name				20	A20
		38	Unit ID				6	A6
		44	Test status (AE-App. E testing performed, NT-no testing performed)			AE, NT	2	A2
		46	Test date for unit (blank, if not tested)		YYYYMMDD		8	I8
		54	Default rate from identical unit testing (if applicable)		lb/mmBtu		6	F6.3
		60	[Reserved]				2	
		62	Type of fuel [5]				1	A1
		63	[Reserved]				3	
		66	Base/Peak Load Indicator			B, P	1	A1
						Total Record Length	66	

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
QA TEST EXTENSIONS/EXEMPTION CLAIMS								
Single-load or Single-level Flow RATA Claim (Modified)	695	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	End date of last annual flow RATA		YYYYMMDD		8	I8
		21	End date of historical load data collection period		YYYYMMDD		8	I8
		29	Historical % usage of low load or operating level (≤ 30.0% of range of operation) in the load data collection period		%	0-100.0	5	F5.1
		34	Historical % usage of mid load or operating level (>30.0 through 60.0% of range of operation) in the load data collection period		%	0-100.0	5	F5.1
		39	Historical % usage of high load or operating level (>60.0% of range of operation) in the load data collection period		%	0-100.0	5	F5.1
		44	Load or operating level for the single-load (or single-level) flow RATA			L,M,H	1	A1
						Total Record Length	44	
Fuel Flowmeter Accuracy Test Extension	696	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Date of last accuracy test		YYYYMMDD		8	I8
		21	Accuracy test expiration date without extension		YYYYMMDD		8	I8
		29	Accuracy test expiration date with extension		YYYYMMDD		8	I8
		37	Type of extension [26]			1-5	2	I2
		39	Quarter and year		QYYYY		5	A5
						Total Record Length	43	

[26] Limited to table of codes:
1 Accuracy test extension (reporting quarter does not qualify as a "fuel flowmeter QA operating quarter")
2 Accuracy test extension based on successful fuel flow-to-load ratio or GHR test
3 Accuracy test extension based on ongoing baseline data collection for fuel-to-load ratio or GHR test
4 Extension claimed because fewer than 168 hours of fuel flowmeter data remained for fuel flow-to-load ratio analysis, after allowable data exclusions were taken under Section 2.1.7.3 of Appendix D
5 Extension for first or fourth calendar quarter for ozone season reporter using fuel flow-to-load test

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
RATA Deadline Extension or Exemption (Modified)	697	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Date of last RATA		YYYYMMDD		8	I8
		21	RATA expiration date without extension		YYYYMMDD		8	I8
		29	RATA expiration date with extension		YYYYMMDD		8	I8
		37	Type of RATA extension or exemption claimed or lost [27]			1-9	2	I2
		39	Year-to-date usage of fuel with sulfur content higher than very low sulfur fuel (as defined in § 72.2)		hrs		4	I4
		43	Year-to-date hours of regular non-redundant back-up CEMS use at this unit/stack		hrs		4	I4
		47	Quarter and year		QYYYY		5	A5
						Total Record Length	51	
QA TEST EXTENSIONS/EXEMPTION CLAIMS								
Quarterly QA Test Exemption Claim	698	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Basis for exemption [28]			1-9	1	I1
		17	Type of test			F,K,L	1	A1
		18	Quarter and year		QYYYY		5	I5
		23	Span scale			L,H	1	A1
						Total Record Length	23	

[27] Limited to table of codes:

1 RATA deadline extension claimed for the monitoring system identified in RT 697/10. Unit/stack operated for fewer than 168 hours this quarter

2 SO_2 RATA deadline extension claimed. Only very low sulfur fuel (as defined in § 72.2) was combusted this quarter

3 Ongoing SO_2 RATA exemption claimed. Only very low sulfur fuel (as defined in § 72.2) was combusted this quarter

4 Conditional SO_2 RATA exemption claimed. Year-to-date usage of fuel with a higher sulfur content than 'very low sulfur' fuel (as defined in § 72.2) is $\leq$ 480 hours

5 Conditional RATA exemption claimed. Year-to-date usage of a regular (B) non-redundant backup monitoring system at this unit/stack is < 720 hours and less than 8 full quarters have elapsed since last RATA

6 Ongoing SO_2 RATA exemption lost. Fuel with a higher sulfur content than very low sulfur fuel (as defined in § 72.2) was combusted this quarter

7 Conditional SO_2 RATA exemption lost. Year-to-date usage of fuel with a higher sulfur content than very low sulfur fuel (as defined in § 72.2) has exceeded 480 hours

8 Conditional RATA exemption lost. Year-to-date usage of a regular non-redundant backup monitoring system has exceeded 720 hours at this unit or stack

9 Exemption From Performing Single-Load RATA at Normal Load. An EPA-approved exemption from performing a required single-load RATA at a normal load is claimed

[28]

1 Exemption for fewer than 168 unit/stack operating hours in quarter or reporting period

2 Linearity exemption analyzer range not used during calendar quarter (dual span only)

3 Flow-to-load test exemptions approved by petition under §75.66 and Section 7.8 of Appendix A

4 Linearity exemption for SO_2 or NO_x analyzer span value $\leq$ 30 ppm

TABLE 4: CERTIFICATION TEST DATA AND RESULTS

CERTIFICATION TEST DATA								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**FIELD NOTES**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
QA Test Extension Claim Based on Grace Period	699	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Type of test (K-Leak Test, L-linearity, R-RATA)			K,L,R	1	A1
		17	Beginning of grace period		YYYYMMDD		8	I8
		25	Date of completion of required QA test		YYYYMMDD		8	I8
		33	Hour of completion of required QA test		HH	00-23	2	I2
		35	Number of unit/stack operating hours from beginning of grace period to completion of QA test or maximum allowable grace period		hrs		3	I3
		38	Date of end of grace period		YYYYMMDD		8	I8
		46	Hour of end of grace period		HH	00-23	2	I2
					Total Record Length		47	

TABLE 5: COMPLIANCE CERTIFICATION DATA

CERTIFICATION INFORMATION								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**PROGRAM**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
CERTIFICATION DATA								
Part 75 Certification Statement and Designated Representative Signature **ARP Only**	900	1	Record type code				3	I3
		4	Electronic representation of Part 75 certification statements [29]				18	A18
		22	DR last name				25	A25
		47	DR first name				15	A15
		62	DR middle initial				2	A2
		64	Date of signature			YYMMDD	6	I6
		70	Title (DR or ADR)			DR,ADR	3	A3
						Total Record Length	72	
Part 72 Certification Statement **ARP Only**	901	1	Record type code				3	I3
		4	Certification statement line #			1-12	2	I2
		6	Certification text (see instructions for verbatim text)				67	A67
						Total Record Length	72	
Cover Letter Text (file-specific) (Optional)	910	1	Record type code				3	I3
		4	Cover letter text, file-specific (see instructions)				69	A69
						Total Record Length	72	
Cover Letter Text (not specific to file) (Optional)	920	1	Record type code				3	I3
		4	Other cover letter text, not file-specific (see instructions)				69	A69
						Total Record Length	72	

[29] The code for this data element is either "CERTIFY," "CERTIFY CONTROLLED," or "CERTIFY DEFERRED."

"CERTIFY" means:

"I understand that EPA may reject any electronic data submission (including Quarterly Reports) if it does not conform to the formatting requirements of EPA's Electronic Data Reporting, Version 2.2, as required by 40 CFR 75.64.

I certify that all data submitted in this report were recorded in accordance with the applicable requirements of 40 CFR Part 75, and that all emissions and quality control data are reported using component ID codes, system ID codes, and formula ID codes which represent current operating conditions."

"CERTIFY CONTROLLED" means:

"I certify that for all hours in which data are submitted following the provisions of 75.34(a)(a) that the add-on emission controls were operating within the range of parameters listed in the monitoring plan and that the substitute values recorded during the quarter do not systematically underestimate SO_2 or other emissions, pursuant to § 75.34.

I understand that EPA may reject any electronic data submission (including Quarterly Reports) if it does not conform to the formatting requirements of EPA's Electronic Data Reporting, Version 2.2, as required by 40 CFR 75.64.

I certify that all data submitted in this report were recorded in accordance with the applicable requirements of 40 CFR Part 75, and that all emissions and quality control data are reported using component ID codes, system ID codes, and formula ID codes which represent current operating conditions."

"CERTIFY DEFERRED" means:

"I understand that for non-operating, affected unit(s) that are not yet certified under 40 CFR 75.4, this electronic report does not have to be generated by a Data Acquisition and Handling System.

I certify that one or more of the affected units identified in this electronic report did not operate and did not generate any SO_2, NO_x, or CO_2 emissions during the reporting period specified in the quarterly submission."

TABLE 5: COMPLIANCE CERTIFICATION DATA

CERTIFICATION INFORMATION								
RECORD TYPE	**TYPE CODE**	**START COL**	**DATA ELEMENT DESCRIPTION**	**PROGRAM**	**UNITS**	**RANGE**	**LENGTH**	**FORMAT (FTN)**
Subpart H Certification Statement and NO_x Authorized Account Representative Signature **Subpart H Only**	940	1	Record type code				3	I3
		4	Electronic representation of NO_x Budget Program certification statements [30]				18	A18
		22	AAR last name				25	A25
		47	AAR first name				15	A15
		62	AAR middle initial				2	A2
		64	Date of signature				6	I6
		70	Title (AAR or AAAR)				4	A4
				Total Record Length			73	
Subpart H General Certification Statement **Subpart H Only**	941	1	Record type code				3	I3
		4	Certification statement line #			1-11	2	I2
		6	Certification text (ask State for verbatim text)				67	A67
				Total Record Length			72	
Contact Person Record (Optional)	999	1	Record type code				3	I3
		4	First name				10	A10
		14	Last name				15	A15
		29	Role/Position of contact person				20	A20
		49	Company				20	A20
		69	DR indicator flag (D-DR/ADR/AAR/AAAR, N–Other)			D,N	1	A1
		70	Phone #				10	I10
		80	Fax #				10	I10
		90	E-mail address				75	A75
				Total Record Length			164	

[30] The code for this data element is either "CERTIFY," "CERTIFY CONTROLLED," or "CERTIFY DEFERRED."

Unless otherwise specified by State requirements, "CERTIFY" means:

"I understand that the State or EPA may reject any electronic data submission (including Quarterly Reports) if it does not conform to the formatting requirements of EPA's Electronic Data Reporting, Version 2.2.

I certify that all data submitted in this report were recorded in accordance with Part 75 and any applicable State requirements and that all emissions and quality control data are reported using component ID codes, system ID codes, and formula ID codes which represent current operating conditions."

Unless otherwise specified by State requirements, "CERTIFY CONTROLLED" means:

"I certify that for all hours in which data are substituted that the add-on emission controls were operating within the range of parameters listed in the monitoring plan and that the substitute values recorded during the quarter do not systematically underestimate emissions.

I understand that the State or EPA may reject any electronic data submission (including Quarterly Reports) if it does not conform to the formatting requirements of EPA's Electronic Data Reporting, Version 2.2.

I certify that all data submitted in this report were recorded in accordance with Part 75 and any applicable State requirements and that all emissions and quality control data are reported using component ID codes, system ID codes, and formula ID codes which represent current operating conditions."

Unless otherwise specified by State requirements, "CERTIFY DEFERRED" means:

"I understand that for non-operating, affected unit(s) that are not yet certified under Part 75 and applicable State regulations, this electronic report does not have to be generated by a Data Acquisition and Handling System.

I certify that one or more of the affected units identified in this electronic report did not operate and did not generate any NO_x emissions during the reporting period specified in the submission."

Appendix A

Table A-1: Structural Differences Between EDR v2.1 and v2.2

Record Type	Data Field Added	Description of New Data Field	Reason for Change	Change Affects Whom ?
300	3-character alphanumeric field at column 64	Type of fuel combusted during the hour	June 2002 rule allows the use of fuel-specific missing data substitution for units with CEMS	Units selecting the new fuel-specific CEMS missing data options in § 75.33 and units with unmonitored bypass stacks, reporting fuel-specific MPC or MER during bypass hours.
360	1-character alphanumeric field at column 86	Base Load or Peak Load Hour	June 2002 rule requires certain LME units to use separate NOx default rate values for peak load and base load hours	LME combustion turbines that operate principally at base load or set point temperature but can operate at a higher peak load or higher internal operating temperature.
504	1-character alphanumeric field at column 53	Non load-based unit identifier	June 2002 rule extends the use of Part 75 monitoring to non load-based units	Non load-based units (e.g., cement kilns, process heaters)
605	1-character alphanumeric field at column 63	Separate reference ratios calculated for each multiple stack	June 2002 rule allows this alternative methodology for calculating flow-to-load reference ratio for multiple stacks	Units measuring stack flow in multiple stacks who elect to calculate separate flow-to-load reference ratios.
650	1-character alphanumeric field at column 75	Base-load or Peak-load test	June 2002 rule requires certain LME units to use separate NOx default rate values for peak load and base load hours	LME combustion turbines that operate principally at base load or set point temperature but can operate at a higher peak load or higher internal operating temperature.
650	6-character numeric field at column 76	NOx default rate for peak load hours		
660	1-character alphanumeric field at column 66	Base/Peak Load Indicator	June 2002 rule requires certain LME units to use separate NOx default rate values for peak load and base load hours, an indicator is needed to identify the type of test	LME combustion turbines in a group of identical units that test for NOx emission rate either at base load only or at both base and peak loads.

Table A-2: Differences between EDR v2.1 and EDR v2.2 Data Elements, Fields and Codes** (March 2003 Editions)

Record Type	Data Field(s) Affected	Description of Change from EDR v2.1	
100	Column 15	Replace "2.1" with "2.2"	New EDR version
102	Column 24	Reserve this field	FINDS ID system is no longer in existence
220	Column 54	Change data element description to incorporate "operational bins" for non load-based units	June, 2002 rule includes new missing data provisions for non load-based units (e.g., cement kilns, process heaters)
300	Column 34	Change data element description to incorporate "operational bins" for non load-based units	June, 2002 rule includes new missing data provisions for non load-based units (e.g., cement kilns, process heaters)
302	Column 32	Change data element description to incorporate "operational bins" for non load-based units	June, 2002 rule includes new missing data provisions for non load-based units (e.g., cement kilns, process heaters)
303	Column 32	Change data element description to incorporate "operational bins" for non load-based units	June, 2002 rule includes new missing data provisions for non load-based units (e.g., cement kilns, process heaters)
305	Column 13	Add new codes for Type of Fuel	June, 2002 rule allows units burning "other gaseous fuels" to qualify as LME units
320	Column 48	Change data element description to incorporate "operational bins" for non load-based units	June, 2002 rule includes new missing data provisions for non load-based units (e.g., cement kilns, process heaters)
360	Column 41	Add new codes for Fuel Type	June, 2002 rule allows units burning "other gaseous fuels" to qualify as LME units
360	Column 66	Simplify reporting. Use only 2 codes, "NOXG" and "NOXU" for NO_x methodology.	Fuel type and control flags are not needed—redundant with columns 41 and 65.
504	Column 10	Add new codes for Unit Type	June, 2002 rule provides reporting provisions for non load-based units
530	Table 26	Add NO_x MPC values for cement kilns and process heaters	June, 2002 rule defines default NO_x MPC values for these types of units
531	Column 10	Add new codes to Parameter	June, 2002 rule allows units burning "other gaseous fuels" to qualify as LME units and use Unit-specific SO2 and CO2 default emission rate. Also, rule allows fuel-specific missing data and maximums for unmonitored bypass stacks
531	Column 27	Add new code "PPM"	Code is needed for sources reporting fuel-specific maximum potential SO_2 and NO_x values
531	Column 34	Add new codes for Purpose or Intended Use	June 2002 rule requires certain turbines using LME to define separate rates for base load and peak load hours
531	Column 37	Add new codes to Type of Fuel	June 2002 rule allows fuel-specific missing data and fuel-specific maximum defaults for unmonitored bypass stacks
535	Column 19	Modify the data element description. Add one new code, "2", and redefine code "S".	June, 2002 rule allows certain units with installed flow monitors to be exempted from 3-load flow RATA testing
536	Columns 10, 16, 22, 25, 26,27	Add references to "operating level" in title and in several data element descriptions. Add "ft/sec" to the "UNITS" column	June, 2002 rule includes provisions for non load-based units to determine the range of operation and normal operating levels
585	Column 14	Add new codes for Monitoring Methodology	June, 2002 rule allows units burning "other gaseous fuels" to qualify as LME units and use Unit-specific SO2 and CO2 default emission rate. Also, rule allows fuel-specific maximums for unmonitored bypass stacks
585	Column 28	Add new codes for Missing Data Approach	June 2002 rule allows fuel-specific, ozone-season specific and non load-based missing data procedures
587	Column 34	Revise data element description	June, 2002 rule allows units that combust "other" gaseous fuels to qualify for annual sulfur sampling frequency, based on results of the demonstration in section 2.3.6 of Appendix D.
610	Column 64	Add "ft/sec" to the "UNITS" column, for the Load or Operating Level field	June, 2002 rule includes provisions for non load-based units, defining operating levels in terms of stack gas velocity
611	Columns 117, 127, 133, 134	Add references to "operating level" in several data element descriptions. Add "ft/sec" to the "UNITS" column	June, 2002 rule includes provisions for non load-based units, defining operating levels in terms of stack gas velocity

(cont.)

Table A-2: Differences between EDR v2.1 and EDR v2.2 Data Elements and Fields (cont.) (March 2003 Editions)

Record Type	Data Field(s) Affected	Description of Change from EDR v2.1	Reason for Change
645	Columns 20, 24, 28, 32, 44, 48, 52, 56, 68, 72, 76, 80	Reserve several fields.	June, 2002 rule significantly changes the methodology for a unit to qualify as a low mass emissions (LME) unit
650	Columns 68 and 69	These fields, which are reserved in EDR v2.1, are needed to report the results of fuel-and-unit-specific NOx emission tests for LME units. After 7/12/02, these tests are to be reported only in v2.2 format, using a new calculational methodology.	June, 2002 rule changes the method of determining LME default NO_x emission rates
660	Column 60	Reserve this field	. Information not needed.
695	Columns 21,29,34,39,44	Add references to "operating level" in several data element descriptions.	June, 2002 rule includes provisions for non load-based units, defining operating levels in terms of stack gas velocity

** To properly assess the changes made to the codes for a particular data field, see the "EDR Version 2.2 Reporting Instructions" for that field, in addition to Tables 2 through 5 of this document.